

PATENT

#4
mm
10-8-03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: : Group Art Unit: 2126

: Examiner: H. N. PATEL

Balijeet S. Baweja et al. : Intellectual Property

Serial No: 09/589,799 : Law Department - 4054

Filed: 06/08/2000 : International Business

Title: AN INTERACTIVE DATA : Machines Corporation

PROCESSOR CONTROLLED DISPLAY : 11400 Burnet Road

INTERFACE FOR TRACKING OF : Austin, Texas 78758

ALLOCATED MESSAGES IN A :

DYNAMIC WORKLOAD BALANCING :

COMMUNICATION SYSTEM :

Date: 10/03/03 :

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence including the present Response and accompanying Transmittal letter is being transmitted via facsimile to USPTO, Group Art Unit 2126 telephone number 703-746-7239, and to the attention of Examiner H. N. Patel on 10/03/03.

Signature

Date

RESPONSE

Commissioner for Patents
P.O.Box 1450
Alexandria, VA 22313-1450

Sir:

This is in response to the Office Action mailed July 3, 2003.

The rejection of claims 1, 2, 7, 8, 12, 13, and 18-20 under 35 U.S.C. 102(b) as anticipated by Yamane et al., US6,317,786 also respectfully traversed. A Rejection based

PATENT
09/589,799

on anticipation under 35 U.S.C. 102, must expressly or impliedly teach every element of invention without modification. The Examiner's application of the Yamane patent to the above claims clearly fails to meet this standard.

The teaching of Yamane is directed to a system in an operating environment quite different from that of the present invention which is specific to dynamic workload distribution in a message driven transaction environment. Such message driven transaction environments are described in detail in cited US Patent 5,799,173 which is part of the record herein, and Examiner's attention is respectfully directed to that patent. In such a message driven transaction environment, a user initiated transaction is allocated to each of a set of messages distributed for performance and stored in sequences of queues. The Yamane patent is directed to management of Web page requests in a Web site managed for a host. Unlike the workload balancing of the present invention which is directed to the distribution of transactions into sets of messages, the workload balancing in Yamane is merely directed to the workload balancing in the processing of Web page requests in the server system at a hosted Web page site. Because of this significant difference in operating environments, it is submitted that the Yamane patent can not teach every element of invention without modification as required by 35 U.S.C. 102.

In addition, Yamane still does not even disclose the elements of the present invention. The problem in message driven transaction environment which the present invention solves would not be considered in the Web site environment of Yamane. In the message driven transaction environment, all of the protocols in the distribution and message

AUS920000172US1

2

PATENT
09/589,799

allocation needed to complete user input transaction requests are invisible to the user. Workload allocation and balancing via message queues is transparent to the initiating user and his input workload appears to be operating as if it were being done on an individual computer. Thus, the advantage to the user is that the user need not be concerned with all of the networking protocols, nodes and channels which must be traversed in the workload distribution, since this is seamlessly, automatically and dynamically done by the workload balancing algorithm. However, the invention has found that the very transparentness of the workload balancing causes operation problems to workload balancing system administrators in the case where messages are delayed or even lost in distribution and allocation. In current workload balancing systems, there is no user friendly process for tracking lost or delayed messages. In current workload balancing systems, it is necessary for system administrators to go to each queue manager's queue on any computer system that could have possibly received a message from the workload balancing algorithm, and view its list of processed or waiting messages. The present invention provides a user interactive display means for monitoring the allocation and distribution of the transaction messages at all levels of the distribution hierarchy.

The Yamane remains unaware of the environment and the problems solved by the invention, and consequently can not disclose the elements of the invention. Considering now the elements of the independent claims, e.g. Claim 1, Yamane does not disclose "distributing data processing transactions into a plurality of messages and for dynamically allocating each of said messages to different computer systems for performance". In Examiner's application of Yamane, the

AUS920000172US1

3

PATENT
09/589,799

distribution is of Web page requests in a Web site server, and not of the plurality of messages allocated in the distribution of a transaction.

Yamane does not disclose "displaying said allocated messages and associated computer systems". At most Yamane may disclose monitoring of the distribution of Web page requests at a Web site, this is not a disclosure of monitoring and displaying message distribution in a transaction distribution environment. Also, while Yamane may disclose displaying aspects of the Web page request distribution, the reference does not disclose the display of tracked allocation of transaction messages.

Claims 18-20 more specifically define the application of the invention to a message driven transaction environment by setting forth the limitation that the allocation of transactions into messages is without user input. In attempting to anticipate these claims, the Examiner applies a combination of two different sections of Yamane. The first covers Web page test requests are made in order to locate distribution problems in Web page requests, and the second is merely a figure showing the display of a Web page tracking log. This Examiner applied combination is submitted to be too vague and general to be the unmodified disclosure required for a 35 U.S.C. 102 anticipation.

The rejection of claims 3-5, 9-11, and 14-16 under 35 U.S.C 103 (a) as being obvious over the combination of Yamane in view of Wolff (US6,185,601) is also respectfully traversed. These claims are submitted to be patentable for all of the reasons set forth above for the independent claims from which they respectfully depend. In addition, these claims involve an implementation wherein the messages into which the transactions are allocated are in turn stored in queues for computer systems from which the messages may

AUS920000172US1

4

PATENT
09/589,799

respectively be reallocated to other computer systems together with means for displaying the reallocated message queues.

Examiner concedes that Yamane does not teach the aspects of the invention set forth in these more specific claims but looks to Wolff to make up for this deficiency. Wolff is at best a very general teaching that computer workloads can be rebalanced. There is not any teaching in Wolff specific to the allocation or reallocation of messages in queues for workload balancing. Also, there also is no teaching in Wolff of displaying the queues of allocated or reallocated messages.

Likewise, the rejection of claims 6 and 17 under 35 U.S.C. 103(a) as being unpatentable over Yamane in view of Suzuki is respectfully traversed. As is the case with the first set of dependent claims discussed hereinabove, claims 6 and 17 are submitted to be patentable for all of the reasons set forth above for the independent claims from which they respectfully depend. In addition, the present claims cover a system and related program wherein the user is enabled to interactively display the allocated messages and their associated computers. Here again, Examiner concedes that Yamane does not teach the aspects of the invention set forth in these more specific claims but looks to Suzuki to make up for this deficiency. Fig. 1 of Suzuki cited by the Examiner is again a very general teaching that computers in a network with workload balancing may be accessed through a user display interface. There is not any teaching in Suzuki specific to the allocation of messages divided from a transaction in queues for workload balancing. Consequently, it is submitted that the teaching of Suzuki does not make up for the shortcomings of the Yamane reference.

AUS920000172US1

5

PATENT
09/589,799

AUS920000172US1

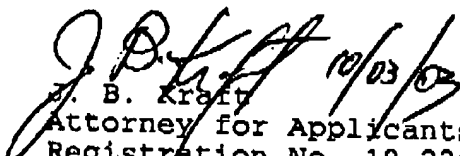
6

PATENT

09/589,799

In view of the foregoing, claims 1-20 are submitted to be in condition for allowance, and such allowance is respectfully requested.

Respectfully submitted,


J. B. Kraft
Attorney for Applicants
Registration No. 19,226
(512) 473-2303

ALL CORRESPONDENCE SHOULD BE DIRECTED TO:

Jeffrey S. LaBaw
IPLaw Dept. - IMAD 4054
IBM Corporation
11400 Burnet Road
Austin, Texas 78758

RECEIVED
CENTRAL FAX CENTER

OCT 03 2003

OFFICIAL

AUS920000172US1

7